Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109
	)	
Universal Service Reform – Mobility Fund	)	WT Docket No. 10-208

REPLY COMMENTS OF THE RURAL BROADBAND ALLIANCE

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Summary

Throughout these proceedings, RBA has cautioned that reform of the USF will not be legally sustainable or serve the public interest and established national objectives unless:

> 1. The changes in the existing FCC rules provide for rural rate-of-return carrier recovery of costs of existing lawful expenses incurred to provide universal service; and
>
> 2. The reform results in clear, quantifiable, predictable, specific support mechanisms to ensure rural carriers of support sufficient to enable them to advance and preserve the provision of universal services available to rural consumers at "reasonably comparable" rates.

The Order issued by the Commission on November 18, 2011, however, ignored these principles and, accordingly, is now the subject of multiple legal challenges. That Order reduced the recovery of the aggregate of interstate access and USF revenues currently received by rural rate-of-return carriers irrespective of the fact that the revenues are needed to recover lawful costs and to sustain the provision of universal service at rates reasonably comparable to those offered in urban areas.

The FNPRM proposes to exacerbate the unsustainable result through the adoption of a model to identify expenses of rural rate-of-return carriers that the Commission will treat as unrecoverable. The model is based on a flawed quantile regression analysis that provides no meaningful regard to the improper and inequitable impact on a rural carrier's opportunity to recover the lawful expenses it has incurred in the provision of universal service.

The Commission's proposed model fails to consider whether the incurred costs to provide universal services are just, reasonable and necessary and "used and useful," in accordance with the Commission's established standards. The RBA offers in these comments facts and data to demonstrate that the quantile regression analysis does not take into account the real world

operational context of a carrier's investments or the location-specific conditions upon which a carrier makes prudent expense decisions.

The readily identifiable flaws in the quantile regression analysis are numerous: the analysis relies on an inappropriate data set; the predictive capabilities of the independent variables utilized are demonstratively poor, and there is resulting inadequate correlation and inaccuracy in the cost variances identified by the model; the expense limit thresholds utilized in the model are arbitrary and bear no relation to a fact-based consideration of whether expenses targeted by the model are prudent; and the proposed annual recalculation of expense limitations established by the model on the basis of factors unknown to a carrier when making an operational expense decision results in a universal service support mechanism that is not predictable.

Even if the regression analysis-based model were not pervasively flawed, neither it nor any model could be expected to sufficiently predict the costs of providing universal service under any and all circumstances in each and every instance. Accordingly, there should always be maintained an alternative process based on actual costs available to address any instance where the model and resulting benchmarks are not adequate to ensure the provision of universal service.

Comments filed by parties in the initial comment round of this FNPRM have thoroughly demonstrated the flaws, frailties, and deficiencies of the proposed regression analysis. The RBA sets forth in these Reply Comments additional analysis and facts and data to demonstrate further that the Commission should not proceed with the adoption of the proposed regression analysis-based model.

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REPLY COMMENTS OF THE RURAL BROADBAND ALLIANCE

The Rural Broadband Alliance ("RBA") respectfully submits the following Reply

Comments in response to the Further Notice Of Proposed Rulemaking ("FNPRM") issued in the

above-referenced proceedings. These Reply Comments specifically focus on the issues set forth

in the FNPRM that are associated with the Commission's proposals regarding the imposition of

limitations on reimbursable capital and operating costs for rate-of-return carriers.[1]

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[1] *Connect America Fund et al*., WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 at para. 1079-1088 (rel. Nov. 18, 2011) ("*USF/ICC Transformation Order*")

I. Introduction – The Commission Should Act Expediently To Reject The Proposed Regression Analysis-Based Model

Throughout these proceedings, the RBA has supported the effort of the Commission to modernize the Universal Service Fund ("USF") and Intercarrier Compensation ("ICC") programs to make them more accountable and broadband-focused in order to meet the goal of providing affordable and comparable communications services to all Americans. RBA has cautioned, however, that reform of these programs will not be legally sustainable or serve the public interest and established national objectives unless:

1. The changes in the existing FCC rules provide for rural rate-of-return carrier recovery of costs of existing lawful expenses incurred to provide universal service; and

2. The reform results in clear, quantifiable, predictable, specific support mechanisms to ensure rural carriers of support sufficient to enable them to advance and preserve the provision of universal services available to rural consumers at "reasonably comparable" rates.[2]

The RBA was not alone in its concerns.[3] The RBA offered a specific proposal and specific proposed rules to address these concerns in a manner that both met the objectives articulated by the Commission and struck the "balance to protect the investments that have

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[2] *See, e.g.*, Comments of the Rural Broadband Alliance, August 22, 2011, p. 3, filed in response to the Commission's *Further Inquiry* issued in these proceedings ("RBA *Further Inquiry* Comments").

[3] *See, e.g.*, Attachment A, Letter of April to Chairman Genachowski from 29 members of the U.S. Senate encouraging the Chairman to ensure that USF/ICC reform changes "strike a balance to protect the investments that have already occurred and the need to overhaul the programs."

already occurred and the need to overhaul the programs."[4]   As reflected by the absence of the mention or consideration of this proposal in the *USF/ICC Transformation Order*, the Commission ignored that proposal and, instead, adopted proposals that reduce the recovery of the aggregate of interstate access and USF revenues currently received by rural rate-of-return carriers that is needed to recover the established lawful investments and operating expenses they incur to provide universal service.

The unlawful and unsustainable nature of this result is the subject of pending legal challenges.[5]   The FNPRM, however, proposes to exacerbate the unsustainable result through the adoption of a model based on a flawed regression analysis that the Commission would utilize to calculate "individual company caps for HCLS,"[6] with no regard to the improper and inequitable impact on a carrier's opportunity to recover the lawful expenses it has incurred in the provision of universal service. Moreover, the FNPRM seeks comment with respect to whether the proposed regression-based analysis should also be applied to the recovery of ICLS or, alternatively, whether alternative mechanisms should be utilized "to implement such a limit for ICLS,"[7] again with no consideration of existing investments lawfully undertaken and consistent with existing standards.

The Commission states in the *USF/ICC Transformation Order* that it has determined to:

> **adopt a framework for ensuring that companies do not receive more support than necessary to serve their communities**. The framework consists of benchmarks for prudent levels of capital and operating costs; these costs are used for purposes of determining high-cost support amounts for rate-of-return carriers.

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[4] Comments of the Rural Broadband Alliance, Attachment – "Transitional Stability Plan," April 18, 2011.
[5] *Direct Commc'ns Cedar Valley, LLC v. FCC*, No. 11-9581 (10th Cir. filed Dec. 18, 2011) (and consolidated cases).
[6] *USF/ICC Transformation Order,* at para. 1079.
[7] *USF/ICC Transformation Order,* at para. 1085.

This framework will create structural incentives for rate-of-return companies to operate more efficiently and make prudent expenditures.[8] (**Emphasis added)**

The *USF/ICC Transformation Order* sets forth no discussion, much less a rational and sustainable basis for the Commission to depart from its established rules and standards and implement the regression analysis. The FCC has an established standard and process pursuant to which it can ensure "that companies do not receive more support than necessary to serve their communities." The Commission's use of the established "used and useful" standard is clear:

> The "used and useful" standard provides the foundation of Commission decisions evaluating whether particular investments can be included in a carrier's revenue requirement. Property is considered "used and useful" for regulatory ratemaking if it is "necessary to the efficient conduct of a utility's business, presently or within a reasonable future period." (Footnote omitted)[9]

Rural rate-of-return carriers have relied upon this standard in making prudent "used and useful" infrastructure investments to provide universal service in accordance with established standards and objectives.

The Commission has offered no basis to suggest any deficiency or flaw in the established "used and useful" standard which offers the Commission necessary tools needed to ensure that the costs "used for purposes of determining high-cost support amounts for rate-of-return carriers" are "prudent levels of capital and operating costs." The Commission has no basis in law or policy to depart from the established standard. Nor does the Commission have any basis to apply new standards retroactively in a manner that significantly reduces the revenues of rural carriers and threatens both their ability to preserve the excellent service now provided in their rural communities and their ability to continue as going concerns.

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[8] *USF/ICC Transformation Order*, para. 210.

[9] *In the Matter of Sandwich Isles Communications, Inc. Petition for Declaratory Ruling*, WC Docket No. 09-133, Declaratory Ruling, September 29, 2010, at para. 12, citing *American Tel. and Tel. Co.*, Phase II Final Decision and Order, 64 FCC 2d 1, at 38, para. 111 (1977).

While this issue frames the thrust of pending appeals of the *USF/ICC Transformation Order*, the resulting impact is far more significant than an abstract legal debate. Instead of providing "sustainable" and "predictable" universal service support mechanisms, as required by the Communications Act, the Order has made it impossible for small rural telecom businesses serving rural communities to plan their investments and operations to serve their communities. Investment has been chilled and job cutbacks are being planned.

The RBA has urged the Commission not to leave rural rate-of-return carriers and the communities they serve in limbo while lengthy legal processes go forward, and further urged the Commission instead to act on its own motion to clarify and modify its Order to address these concerns.[10] Within the context of this FNPRM, the RBA respectfully urges the Commission to act expediently to discard its initial proposal to utilize the regression-based model and, thereby, at minimum alleviate the additional uncertainty and instability that the proposal has caused.

Comments filed by parties in the initial comment round of this FNPRM have thoroughly demonstrated the flaws, frailties, and deficiencies of the proposed regression analysis.[11] The RBA sets forth below additional analysis, facts and data to demonstrate further that the Commission should not proceed with the adoption of the proposed regression analysis-based model.

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[10] *See*, Letters from Stephen G. Kraskin, on behalf of the RBA, to Marlene H. Dortch, FCC, WC Docket No. 10-90, *et al.* (filed Jan. 9, 2012 and February 8, 2012).
[11] *See, e.g.*, Comments of the Rural Associations, pp. 63-74 and Appendices D and E; Comments of the Nebraska Rural Independent Companies, pp. 9-50; and Comments of Alexicon Telecommunications Consulting, pp. 10-17.

II. The Proposed Model To Limit Reimbursable Capital And Operating Expenses Is Flawed; The Model Ignores The Actual Location-Specific Real Costs Of Providing Universal Service And Inequitably Targets Just And Reasonable Expenses Incurred On The Basis Of Prudent Planning

In the *USF/ICC Transformation Order*, the Commission adopted a framework to impose limitations on certain capital and operating expenses (Capex and Opex, respectively) included in the recovery of universal service costs from the legacy High Cost Loop Support (HCLS) mechanism.[12] In so doing, the Commission introduced a proposed quantile regression statistical analysis (QRA) methodology meant to determine a range of "allowable" levels of certain Capex and Opex line items in the algorithm that calculates study area cost per loop. Some details of the results of the 90th quantile QRA were published in Appendix H of the Order. In the FNRPM, the Commission requests comments on the methodology for determining the Capex and Opex limits, and how the methodology will apply to Interstate Common Line Support (ICLS).

A. **The Institution of Capital and Operating Expense Limits is Fundamentally Flawed**

The institution of Capex and Opex limits is conceptually flawed in several ways. The most serious flaw is that caps give no consideration as to whether the incurred costs are just, reasonable and necessary. The results of a predictive model should never be a substitute for the actual cost of service. Also, the institution of caps as proposed in the Order is retroactive and, therefore, denies rural companies providing universal service of the sufficient and predictable recovery mechanism required by the Communications Act. Additionally, contrary to the Commission's stated goal of incenting broadband investment, Capex and Opex caps provide a significant disincentive for such investment**.**

1. **The Proposed Capital and Operating Expense Caps Do Not Consider the Reasonableness and Necessity of the Costs Incurred**

The Commission's institution of Capex and Opex caps fails to consider whether the incurred costs to provide universal services are just, reasonable and necessary and "used and

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[12] *USF/ICC Transformation Order*, Section VII D. 3.

useful," in accordance with the Commission's established standards. Rather, the amount of the expense is compared to a data set that does not take into account the real world operational context of the investments and location-specific conditions upon which prudent expense decisions are based.

The RBA does not object to the concept of the general utilization of a model to predict the costs to provide universal service and the resulting necessary support to provide a sustainable and predictable universal service support mechanism. The RBA recognizes that a model-like system manifested in the form of "average schedules" has been utilized for years to provide many rural rate-of-return carriers with a reasonable opportunity to recover a portion of the costs necessary to provide universal service. The "average schedule" system, however, is an optional aspect of the Commission's rules requiring cost-based reporting utilized in conjunction with the Commission's "used and useful" standard to establish an individual carrier's revenue requirement. In the event that a rural rate-of-return carrier utilizing the average schedule model determines that the average schedules do not afford it the opportunity to recover its regulated costs, the existing Commission rules provide the carrier with the opportunity to establish its revenue requirement on the basis of a demonstration of its actual "used and useful" expenses.

The Commission and all parties should recognize that a rural rate-of-return carrier must retain the opportunity to obtain support based on its actual costs. Even if the regression analysis-based model were not pervasively flawed to the extent its immediate rejection is warranted, it should not be adopted in the absence of the provision of an opportunity for a rural carrier to recover its actual just and reasonable costs. No model could ever sufficiently predict in every instance and circumstance the costs of providing universal service under any and all circumstances. Accordingly, there should always be maintained an alternative process based on

actual costs available to address any instance where the model and resulting benchmarks are not adequate to ensure the provision of universal service. This is not simply a matter of policy equity; it is also a matter of economic reality.

In order to understand this economic reality, the Commission and all parties should recognize the proper use and limitations intrinsic to predictive statistical models. Specifically, models are a simplified method used to estimate actual future behavior/results through the use of predictive (or independent) variables that correlate to the future behavior/result (or dependent variable). Accordingly, the usefulness and accuracy of any model is constrained by the quality of the correlation between the independent variables used and the resulting dependent variable. Furthermore, a model is not, and should not be considered, a replacement for the actual result itself. Consequently, it is for this reason that any model adopted should be done so in conjunction with maintaining a process, consistent with existing rules, which enables a carrier to obtain universal service support on the basis of a factual demonstration that the actual costs to provide universal service in a particular area exceed the costs predicted by the model.

2. Institution of Caps Or Any New Model Should Not Be Retroactive

The Commission has set forth its intent to apply the Capex and Opex limits effective July 1, 2012.[13] As a result, the Commission has determined to adopt a process that would place limits on HCLS recovery of expenditures already incurred by companies. This retroactive application places companies in the untenable position in which investments deemed just, reasonable, and necessary yesterday may improperly be deemed "excessive" and not "used or useful" tomorrow. Retroactive application of Capex and Opex limits creates an unpredictable USF funding

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[13] *See, USF/ICC Transformation Order* Para. 210.

mechanism which is contrary to the Communications Act. For all rural rate-of return companies, the proposed regression analysis together with the proposed implementation mechanics create a funding mechanism that is neither sufficient nor predictable in the near or long term. Even the Commission recognized the difficulty it created for any company attempting to plan its business on the basis of the proposal and the impossibility of developing complete projections and analysis.[14] Even if the FCC ultimately arrives at a rational and useful new model, the model should not be utilized to constrain the recovery of existing expenses incurred lawfully under existing standards.

3. The Institution of Caps is a Disincentive to Broadband Investment

Among the Commission's stated goals of the Connect America Fund is to "ensure universal availability of modern networks capable of providing voice and broadband service."[15] Yet the Commission seeks to limit the investment in loop and transmission technology necessary to meet this goal by placing caps on Category 1 Cable and Wire Facility and Category 4.13 Transmission Equipment capital expenditures without regard to the reasonableness or necessity of such expenditures. Furthermore, the introduction of Capex limits based on the expenditures of other companies produces another factor that results in unpredictability and questionable sufficiency of annual support amounts. How can an individual company make investment plans when its cost recovery is dependent on the level of expenses of other companies? Without the

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[14] *USF/ICC Transformation Order*, fn. 2210: "For purposes of this analysis, we estimate the national average cost per loop for purposes of redistributing support to those carriers not affected by the benchmarks to be approximately $455. This estimate does not take into consideration the impact on the national average cost per loop of other rule changes that we adopt in this Order, such as the removal of price cap-affiliated study areas from HCLS and the updated corporate operations expense limitation formula. Both of these other changes to HCLS will also affect the distribution of HCLS, **making it difficult, at this time, to estimate the combined impact of the proposed benchmark methodology and these other changes.   Therefore, the actual redistribution among carriers that continue to receive HCLS may vary.**" (**Emphasis Added**.)

[15] *USF/ICC Transformation Order*, para 17.

ability to reasonably establish sustainable and predictable revenue flows, a carrier's ability to secure the necessary financing to fund infrastructure investment will inevitably be restricted. It is irrational to believe that limiting the recovery of the costs of universal service will encourage further broadband investment. Rather, limiting Capex and Opex provides a disincentive both to lenders to supply needed funds and to companies to make the investments. The RBA has throughout its involvement in this proceeding encouraged the Commission to adopt policies that will accomplish the goal of ubiquitous broadband availability while avoiding perverse incentives and unintended consequences.

B. The Proposed Quantile Regression Analysis is a Flawed Methodology

The proposed Quantile Regression Analysis ("QRA") is an inappropriate and ineffective methodology for setting capital and operating expense limits for recovery. The QRA's many flaws include: the use of an incorrect data set for cost comparisons; the low correlation of the selected independent variables to the costs they are intended to predict; the arbitrary selection of a threshold limit; and the failure to provide a sufficient and predictable support mechanism. In addition, the Capex and Opex caps produces uneconomic unintended consequences because it fails to account for real world network decisions and excludes just and reasonable expenses.

1. The Quantile Regression Analysis uses an Inappropriate Data Set for Cost Comparison.

In setting the parameters of the methodology to be used to cap cost, the Commission required "that companies' costs be compared to those of similarly situation companies."[16] However, the QRA, as explained in Appendix H of the Order, uses the costs from nearly all

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[16] *USF/ICC Transformation Order,* para 217.

study areas as the basis of cost comparison.[17] This is an inappropriate data set to use because it

does not take into account the level of network deployment and availability of advanced services

in the different study areas. Inclusion of these costs in the benchmark data set incorrectly

implies that all carriers have the same level of advanced network deployment and that this level

is the desired end result of network deployment. A company with a study area providing only

basic universal services via copper lines and an aging legacy digital switch is not "similarly

situated" to a company that has invested in fiber optic transmission and IP switching in order to

provide advanced broadband services to its customers.

As noted earlier, one of the goals of the Connect America Fund is to "ensure universal

availability of modern networks capable of providing voice and broadband service."[18] It is

illogical to use the costs of companies with limited or no broadband deployment to set the level

of investment and operating costs needed to deploy a broadband network. It follows that every

dollar spent on broadband deployment would be deemed an "excessive" cost when compared to

the same network without advanced services network costs. This false basis of comparison will

result in insufficient support for broadband deployment and thwart the Commission's goals.

2. The Independent Variables Used Have Poor Predictive Capability

Several commenters note the poor predictive capability of the variables used in the

Quantile Regression Analysis presented in Appendix H of the ICC/USF Order.[19] An analysis of

the p-values and R-squared values of the QRA demonstrates the predictive capability of the

independent variables. The p-value of a variable indicates the probability that the result is

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[17] *USF/ICC Transformation Order*, Appendix H, para 5.

[18] *USF/ICC Transformation Order*, para 17.

[19] See the Comments of Alexicon Telecommunications Consulting, p. 12; Blooston Rural Broadband Carriers, p. 5
and Attachment B; NASUCA, et al., p. 49; Nebraska Rural Independent Companies, p. 47; Section E Rural Carriers,
p. 7; and the Rural Associations, pp. 70-71.

random as opposed to causally-linked. Accordingly, a .01 or 1% p-value means there is a 1-in-100 chance that the result seen is random and not correlated to the independent variable in question. A .05 or 5% value is generally held as the lowest acceptable threshold for establishing a causal relationship.[20]

The QRA uses the following independent variables as proxies for scale, population density, and terrain: loops and housing units (scale); number of census blocks (density); land area and percent water (terrain). The Commission provides no support for the notion that scale, population density, and terrain are the best - or even satisfactory - predictors of network deployment and operating costs.   Examination of the p-values shows that the independent variables used have poor correlation to the costs to be predicted. Of the eleven HCLS algorithm costs, six have only loops and housing units with p-values of .01 or less. A complete grid of the independent variables with p-values less than .01 and less than .05 is shown in Appendix A to these Reply Comments.

Also, the Commission should note that the size of the p-value says nothing about the size of the effect the independent variable has on the dependent variable. It is possible to have a highly significant result (very small p-value) for a miniscule effect. The R-squared of the regression value gauges the accuracy of the predicted values. R-squared is the amount of the variation in a dependent variable that is predicted by independent variables.[21] In other words, an R-squared value of .25 means that only 25% of the change in the dependent variable is explained by the independent variables. In the case of the QRA, the R-squared values are between .0782 and .5863 which means that only 8% to 58% of the variation in costs can be attributed to the

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[20] Princeton University, Data and Statistical Services. *Interpreting Regression Output* at (http://dss.princeton.edu/online_help/analysis/interpreting_regression.htm)
[21] *Ibid.*

changes in the independent variables used and between 92% and 42% of the variations are unexplained.

Accordingly, the QRA model proposed by the Commission should not be used to determine the Capex and Opex limits because it demonstrates poor correlation and predictive quality. Using a model with such poor traits as displayed by the QRA to restrict HCLS to companies produces arbitrary and capricious results unrelated to the real, lawful, and reasonable costs of providing universal service. The arbitrary and capricious nature of the results demonstrates on its face that the adoption of the proposed model by the Commission would fail the arbitrary and capricious limitation on reasoned regulatory agency decision-making. If the Commission is intent on applying limits to universal service recovery and to deploy the use of a statistical model to do so, at minimum, the model should demonstrate its validity as a predictive tool and the Commission should additionally recognize the need for a fail-safe process to enable rural rate-or-return companies to obtain USF on the basis of their actual costs when the prediction of the model proves insufficient. Since any objective analysis of the QRA plainly shows poor correlation and poor accuracy in explaining cost variances, it should be discarded.

3. The Expense Limit Thresholds are Arbitrarily Selected By The Proposed Model.

The Commission uses the 90th quantile of the costs of companies used in the QRA as the benchmark for HCLS recovery. The selection of this threshold is completely arbitrary with the Commission's sole explanation for the benchmark as "costs exceeding 90 percent of their similarly-situated peers **may raise** questions about the prudence of such expenditures."(**Emphasis added**.)[22] As previously addressed, the Commission's assertion that

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[22] *USF/ICC Transformation Order*, Appendix H, para 12.

all the companies in the cost data set are "similarly situated" is factually incorrect. Even if the Commission's statement that costs exceeding 90% of other companies' costs "may be" called into question is accepted for the sake of discussion, there is a huge disparity between identifying an expense as "questionable" and determining that the specific expense incurred under specific conditions to provide universal service should automatically be treated as unlawful and lead to a reduction in cost recovery.

In fact there is no evidence in the record of this proceeding that any cost incurred by any rate-of-return carrier in order to provide universal service is anything other than just, reasonable and necessary and "used and useful," consistent with the standards applicable when the costs were incurred. There is no justification offered or even suggested by the Commission that warrants the treatment of any such costs incurred as "excessive" and unrecoverable.

Moreover, there is no justification to presume that the same benchmark should be applied to each of the costs limited by the QRA. Before a benchmark for costs is set, there should be a demonstrable link to a threshold at which costs are believed to be unreasonable and a factual basis for establishing the threshold. Even if valid benchmarks are achieved through statistical analysis, the results of a predictive model should not trump the actual, real-world costs that may be necessary to provide service even if the costs are not predicted by the model. The benchmark should not limit HCLS recovery, or any aspect of cost recovery, when a carrier can demonstrate that the costs incurred were just, reasonable and necessary for the provision of universal services.

4. The Annual Recalculation of Caps Fails to Provide a Sufficient and Predictable Support Mechanism.

The Commission's proposal to recalculate investment and operating expense caps on an annual basis fails to provide the sufficient and predictable universal service support mechanism required by the Communications Act. Capital expenditures are recovered through HCLS over

time through the inclusion of depreciation expense and return on investment in the study area cost per loop algorithm. The proposed annual recalculation of Capex caps creates uncertainty by raising the risk that today's prudent and reasonable investment will be considered "excessive" in the future solely based on the changes in investment levels by other carriers. Furthermore, a methodology that deems an investment allowable in one year and "excessive" in the next year is arbitrary and capricious on its face. For carriers who exceed the caps proposed by the model, the limits fail to provide a sufficient mechanism for lawful "used and useful" universal service costs already incurred. In addition, the annual proposed recalculation applied retroactively will, with no predictability or sufficiency, impede the ability of a carrier to repay debt incurred for network deployment and operation, and also impede the carrier from planning network deployment and operations because of the absence of a sufficient and predictable mechanism.

With respect to the consideration of additional future broadband investment, the lack of predictability created by the annual recalculation of Capex and Opex limits renders borrowing untenable because future revenue streams cannot be estimated with any accuracy. The RBA has raised concern before the FCC and in several forums that the *USF/ICC Transformation Order* has already chilled infrastructure investment, adversely affected rural economic development and has led to planned job reductions.

The concern is not academic. In a January 23, 2012 "Stakeholder Announcement," the Department of Agriculture's Rural Utilities Service (RUS) stated that

> . . . due to the Federal Communications Commission's (FCC) recent order reforming the Universal Service Fund (USF), RUS is revising the financial models needed to support a loan request. In an effort to most effectively evaluate the financial feasibility of new projects, we have suggested to applicants that they wait to submit new applications until RUS provides updated financial models. These new guidelines are imminent. We believe these updates are necessary to take into account regulatory changes and we regret any confusion that may have occurred as a result."

In a follow-up February 3, 2012 Open Letter to All Telecommunications Borrowers and Potential Loan Applicants,[23] David J. Villano, Assistant Administrator, Telecommunications Program – Rural Utilities Service, recognized that the *USF/ICC Transformation Order* "may have an impact on the projected revenues for applicants applying under the Telecommunications

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[23] The letter from Assistant Administrator Villano is attached as Attachment B.

Infrastructure Loan Program." After setting forth detailed requirements for the provision of 5-year pro forma financial statements from borrowers and loan applicants, Mr. Villano requested a schedule of projected network access revenue prepared and signed by a Cost Consultant for a "Cost Company;" and in the case of an "Average Schedule Company," the letter advises that the qualifications of the preparer of the schedule should be provided."

The RUS, other potential finance organizations, and all rural Cost Consultants and financial advisers will, however, find it impossible to develop a reasonable and reliable full financial picture of a rural carrier's projected access and universal service revenue cost recovery based on the *USF/ICC Transformation Order*. The imposition of limitations based on a regression analysis recalculated annually and applied to expenses that have been incurred makes it an impossible task to determine any reasonable predictability or whether the universal service mechanism is sufficient.

As previously discussed, even the Commission has acknowledged the difficulty of predicting the results based on the proposed regression analysis.[24] Nonetheless, the Commission asserts, "The new rule will inject greater predictability into the current HCLS mechanism, as companies will have more certainty of support if they manage their costs to be in alignment with their similarly situated peers." [25] The facts demonstrate the opposite. How can there be greater predictability when the proposed regression analysis mechanism would be recalculated annually to reflect the aggregate changes in expenses of all of the carriers?

The proposal would place rural carriers in an untenable position contrary to the intent of the Communications Act. For example, if a rural carrier made a decision to incur additional investment to expand the provision of broadband in its service area based on the limits established by the regression analysis and in place on the day of its decision, the carrier would not be able to predict that the recovery of the annual depreciation expense to recover the investment will be sufficient or predictable over the life of the investment. It is impossible for any carrier, financial advisor or financial institution to predict what the aggregate rural carrier expense decisions would be under the proposed model or how the changes in expenses

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[24] *See*, fn 14, *supra*.
[25] *USF/ICC Transformation Order*, para. 221.

encouraged by the model in any one year will impact the limitations developed by the model in future years.

The FCC has apparently anticipated this criticism:

> We note that the fact that an individual company will not know how the benchmark affects its support levels until after investments are made is no different from the current operation of high-cost loop support, in which a carrier receives support based on where its own cost per loop falls relative to a national average that changes from year to year. Even today, companies can only estimate whether their expenditures will be reimbursed through HCLS.[26]

The Commission's statement cited above is perhaps most notable for how revealing it is of the Commission's apparent cavalier view of its statutory mandate to establish "specific, predictable and sufficient" mechanisms to preserve and advance universal service. [27] The quoted statements reflect the essence of the flaws in the reform process that the RBA has formally characterized as a "cart before the horse" approach.[28]

The Commission's defense of the lack of predictability of its proposed mechanism essentially says, "So what? You rural carriers already have to live with an unpredictable HCLS mechanism as a result of the cap we imposed!" The real failure in this approach is the failure of the policy-maker to recognize the impact on the rural consumer and rural communities that results when the Commission fails to establish a specific, sufficient and predictable mechanism.

As the Commission notes, the existing rules already cap the high cost loop fund available to rural rate-of-return carriers. This fact, however, does not provide either a legal or policy basis upon which to move forward with the Commission's proposal to exacerbate the predictability and sufficiency problem further. As the Commission suggests, the impact of the existing HCLS cap is undoubtedly not always fully understood or recognized when investment decisions are made by rural carriers.

The fact is that under the existing cap and absent the imposition of the proposed regression analysis, the application of the current high cost formula assigns more and more cost recovery in the aggregate to the HCL fund as rural companies invest more in their networks to

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[26] *USF/ICC Transformation Order*, para. 220.
[27] 47 USC § 254(b)(5).
[28] RBA *Further Inquiry* Comments, pp. 25-34.

expand their services. As this occurs, the aggregate revenue requirement and need for support continues to grow far above the cap. The result is a growing cost recovery gap and financial jeopardy for all rural companies because the funding need grows in excess of the funding available.

More importantly, however, from a policy perspective and consideration of the intent of the Universal Service provisions of the Communications Act, the impact of the existing HCL cap on rural consumers and communities has been ignored in this proceeding except to the extent that the Commission now elects to use the existing cap and its resulting impact on the difficulty to predict the existing sufficiency of the USF as a basis to add to the difficulty in determining whether the support mechanism is sufficient. The proposed imposition of the Commission's regression analysis model on top of the existing HCLS cap exacerbates the uncertainty and resulting absence of predictability in the universal service mechanism.

The imposition of the Capex and Opex limits based on the proposed regression analysis and the adoption of the proposed annual recalculations of these caps (based on information unknown to a carrier at the time it makes a prudent expense decision) will each result in the absolute uncertainty and unpredictability of revenue flows. The proposed regression analysis should be discarded; its adoption would stymie broadband investment and further threaten the financial viability of small, rural rate-of-return companies.

5. The Capex and Opex Caps Produces Uneconomic and Unintended Consequences

The quantile regression analysis proposed by the Commission fails to take into account differences in company-specific network deployment decisions based on service area specific factors. As a result, the analysis produces results that exclude or reduce recovery of just and reasonable used and useful expenses. In fact, there are many cases where the QRA punishes efficient network deployments, while it would potentially reward uneconomic choices. These cases are not "anomalies" in the statistical analysis, but the systemic failure of a model with an incorrect base data set, poor predictive capabilities, and inaccurate unsupported assumptions. In addition to the other noted deficiencies of the QRA, the regression analysis fails to take into account the costs based on real world network design and deployment.

As noted at the outset of these Reply Comments, other parties have already provided specific and compelling evidence on a macro basis of the deficiencies of the proposed model. These deficiencies are pervasive and not descriptive of anomalies or exceptions. RBA submits that a review by the Commission of the results of the predictions of its proposed model on a micro basis will demonstrate that the model repeatedly targets and limits the recovery of expenses that are just, reasonable, used and useful, and reflective of prudent operational decisions undertaken to achieve objectives established by federal statute and federal agency objectives. We respectfully offer two such case studies.

a. Case Study #1: Ellijay Telephone Company, GA

With respect to the first case study, an analysis of the Capex and Opex limits and resulting reduction in High Cost Loop Support for the Ellijay Telephone Company is attached as Appendix B. For reference, Appendix B, Section 1, column A contains the algorithm step and description for calculating the study area cost per loop[29]; column B contains the actual costs of Ellijay Telephone Company for the 2010-1 HCLS data submission; column C contains the capped cost amount per the 90th quantile regression analysis; column D contains the amount of room under the cap or disallowed costs (the difference between column B and column C); and column E contains the algorithm amounts if the QRA caps are applied to Ellijay.

Ellijay Telephone Company serves over 12,000 access lines in northern Georgia in a single exchange adjacent to the Chattahoochee National Forest. Ellijay was founded 1904 and after more than one hundred years of service to their customers, the company currently offers a full spectrum of telecommunications products including broadband Internet service. Ellijay has prudently invested in a distributed network architecture of host-concentrators which allows the company to provide the shorter loop lengths necessary for robust broadband deployment. The host-concentrator architecture was the most cost effective and operationally prudent option for Ellijay's service area.

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[29] For definitions of the algorithms steps, see Appendix B of the National Exchange Carrier Association's (NECA) Annual Universal Service Fund submission to the FCC at http://www.fcc.gov/Bureaus/Common_Carrier/Reports/FCC-State_Link/Monitor/usf10af.zip

In comparison to other network deployment architectures, the host-concentrator configuration will, however, result in a greater amount of Category 4.13 Subscriber Transmission Equipment (COE 4.13) relative to Category 1 Exchange Cable and Wire Facility (CWF 1) because transmission equipment is placed in remote field units. As a result of this prudent investment made on the basis of a rational engineering decision, however, the quantile regression analysis punishes Ellijay's prudent use of resources in deploying modern broadband infrastructure. As seen below in an excerpt from Appendix B, the quantile regression analysis fails to account for the real world reality that Ellijay faced when making a rational, reasonable network, and would punish Ellijay financially for its sound decision.

Clmn:	(A)	(B)	(C)	(D)
	ALGORITHM STEP	ACTUAL COST	90th QUANTILE CAP	CAP ROOM / DISALLOWED COSTS
AS1	Cable & Wire Facility deemed Category 1 ("CWF 1")	$ 29,220,927	$ 41,710,821	12,489,894
AS2	Central Office Equipment, Category 4.13 ("COE 4.13")	$ 13,786,303	$ 9,156,859	(4,629,444)

The unintended consequence of the QRA in Ellijay's case is to incent less efficient and more expensive deployment options. If for example, Ellijay had used a different architecture and spent an additional $12.5 million in CWF 1 with $4.5 million less in COE 4.13, the company's HCLS recovery would not be limited by the model which disregards the fact that Ellijay would have spent an additional $8 million ($635 per loop) in infrastructure.

Furthermore, as shown in Appendix B, Section 2, the application of the quantile regression analysis would result in a **51%** reduction in Ellijay's High Cost Loop Support despite the fact that the company has made cost effective and operationally efficient investments in order to deploy broadband to their customers. There is no basis in fact to conclude that Ellijay's costs are "excessive". In fact, closer examination of the QRA cap results in Appendix B demonstrates that Ellijay's operating cost are actually less in total than the total costs incurred by the companies to which the model compares Ellijay.

When viewed in the aggregate, Ellijay's Total Unseparated Costs are almost $1.6 million less than the aggregate capped Total Unseparated Costs proposed by the model. In other words, Ellijay's recoverable HCLS cost base was $1.6 million (or 13.8%) less than 90% of the "similarly-situated" companies. As a reward for Ellijay's efficiency in deploying broadband, the

Commission's quantile regression analysis, however, would deprive Ellijay of 51% of its High Cost Loop Support.

b. Case Study #2: Cordova Telephone Cooperative, AK

With respect to the second case study, an analysis of the Capex and Opex limits and resulting reduction in High Cost Loop Support for Cordova Telephone Cooperative is attached as Appendix C. It follows the same format as Appendix B.

Cordova Telephone Cooperative serves approximately 1,800 access lines in and around the city of Cordova, located on the coast of Alaska near the mouth of the Copper River and surrounded by the Chugach Mountains. Despite being on the mainland coast, the only access to Cordova is via boat or plane as there are no roads connecting Cordova to any other town. The city of Cordova made national news last month when it was buried under 18 feet of snow and the National Guard was called out due to the state of emergency. Despite the challenging terrain and operating conditions, CTC provides universal telecommunications services including broadband to its customers who include the residents of Cordova, remote Eyak Native American communities, and government institutions such as a Federal Aviation Administration outpost.

In order to provide basic universal services to its customers in remote areas, CTC has invested in microwave transmitters and towers. Microwave radio is a cost-effective and efficient transmission method; and in some situations, it is the only viable deployment option. Radio transmitters, receivers, repeaters and other radio central office equipment are properly categorized as Category 4 transmission equipment.[30] Because of this necessary, reasonable, used and useful, and prudent investment in microwave transmitters to provide universal services, CTC's balance of Category 4.13 Transmission Equipment is relatively higher than the companies that are the basis of cost comparisons in the Commission's quantile regression analysis (the so-called "similarly situated" companies).

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[30] Code of Federal Regulations, Title 47, Section 36.126.

As demonstrated below in an excerpt from Appendix C, the quantile regression analysis fails to account for the real world realities in deploying universal services faced by companies such as CTC, and punishes CTC for its needed use of microwave transmitters and towers.

Clmn:	(A)	(B)	(C)	(D)
	ALGORITHM STEP	ACTUAL COST	90th QUANTILE CAP	CAP ROOM / DISALLOWED COSTS
AS1	*Cable & Wire Facility deemed Category 1 ("CWF 1")*	$ 6,994,865	$ 17,523,785	10,528,920
AS2	*Central Office Equipment, Category 4.13 ("COE 4.13")*	$ 6,714,510	$ 3,999,575	(2,714,935)

The unintended consequence of the QRA in CTC's case is to incent less efficient and more expensive deployment options. For example, if CTC had spent $10 million in undersea cable facilities to provide telecommunications services to remote areas (as opposed to $3 million in microwave transmitters), the company's High Cost Loop Support would not be limited by the regression analysis model. Instead, CTC's prudent and efficient investment in microwave transmitters is deemed "excessive" by the quantile regression analysis and results in a 20% reduction in HCLS as shown in Appendix C.

There is no basis in fact to conclude that CTC's costs are "excessive". In fact, closer examination of the QRA cap results in Appendix C reveals that CTC's operating cost are significantly less in total than the companies to which the proposed model compares CTC. When considered in the aggregate, CTC's Total Unseparated Costs are over $2.7 million (or 30.1%) less than the aggregate capped Total Unseparated Costs proposed by the model. Despite the unique operating challenges it continually faces, CTC expended 30.1% less to provide universal services than 90% of the "similarly-situated" companies. However, the Commission's proposed quantile regression analysis would deprive CTC of 20% of their High Cost Loop Support because of costs that the model targets as "excessive" and unrecoverable.

The impact of the proposed regression analysis model on any individual company requires: 1) an extensive, and otherwise unnecessary, analysis to determine what expenses have been targeted by the model and deemed unrecoverable; 2) a review of the targeted expenses in the context of the specific facts applicable to the specific service area; and 3) an analytical comparison of the underlying operational choice to other alternative choices available to provide universal service and to meet established federal service objectives in rural communities. The

case studies of Ellijay and CTC offered above are illustrative of this time-consuming and costly process.

The results are not anomalies. Ellijay, CTC and other rural carriers that would be most immediately adversely harmed by the imposition of the proposed model have deployed networks and incurred expenses fully subject to regulatory scrutiny and consistent with established standards. The case study process provided above can be replicated for other companies, but based on the evidence before the Commission, rural companies should not be required to undergo further time and expense to demonstrate the clear and pervasive deficiencies of the proposed regression analysis.

Conclusion

The quantile regression analysis-based model proposed by the Commission should be rejected. The model is based on flawed methodology that fails to provide any rational basis for the Commission to treat expenses incurred by a rural carrier as unlawful and unrecoverable. The record in this proceeding thoroughly demonstrates on a macroeconomic basis the deficiencies of both the regression analysis and the proposed model. Moreover, RBA has demonstrated on a microeconomic basis that the application of the model exposes the real-world inadequacy of the analysis and the model. The result of utilizing the model is the targeting of a rural rate-of-return carrier's expenses as unrecoverable without regard to the specific facts and circumstances that demonstrate that the targeted expenses are "used and useful" in the provision of universal service. There is no basis to adopt a process that denies a carrier an opportunity to recover lawful expenses that it has incurred.

As the Commission has essentially acknowledged, it is impossible for a universal service provider to utilize the proposed model and predict what level of universal service support it will receive and whether the support will be sufficient to enable the carrier to recover the lawful and reasonable costs it incurs in the provision of universal service. The analysis derived from the application of the methodology only provides a static and temporary view of how the model treats expenses incurred by a carrier. The Commission's proposal to recalculate annually the expense limitations established by the model on the basis of consideration of additional expenditures by other carriers renders it impossible to determine and predict whether an expense

recoverable under the model in one year will be recoverable or disallowed in subsequent years. This disregard of the statutory requirement for a specific, sufficient and predictable mechanism is further exacerbated by the problem with predictability caused by the cap imposed on HCLS as recognized - but, not addressed – by the Commission in the *USF/ICC Transformation Order*.

The manifestation of the adverse impact of the *USF/ICC Transformation Order* on rural economic development, job maintenance and job creation is increasingly evident as rural carriers freeze planned investment and budget for future operations facing job cut backs. The proposed quantile regression analysis-based model and its predicted impacts have further chilled rural rate-of return carriers. For all the reasons set forth herein, the RBA respectfully urges the Commission to act expediently to reject the utilization of the proposed model. Respectfully submitted,

THE RURAL BROADBAND ALLIANCE

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February 17, 2012

Appendix A: p-Value Analysis   **Prepared by Alexicon Telecommunications Consulting**

List and Count of Independent Variables with p<.01 for 90th percentile regression per Appendix H, p. 638

Total Variables Included in Regression (not necessarily all significant)	AS1 CAT 1 CWF and CWF Capital Leases	AS2 Cat 4.13 COE and COE Capital Leases	AS7 Cat 1 Materials and Supplies	AS8 4.13 Materials and Supplies	AS13 Cat 1 CWF Expense	AS14 Cat 4.13 COE Expense	AS15 Cat 4.13 and Cat 1 GSF and Nework Support Expense	AS16 Cat 4.13 and Cat 1 Network Ops Expense	AS17 Cat 1 Depreciation Expense	AS18 Cat 4.13 Depreciation Expense	AS21 Cat 4.13 and Cat 1 Benefits (Excluding Corporate)
Loops Housing_Units_nu Housing_Units_uc Housing_Units_ua Land_Area_nu Land_Area_uc Land_Area_ua Percent_Water Census_Blocs_nu Census_Blocs_uc Census_Blocs_ua	Loops Housing_Units_nu Housing_Units_uc Land_Area_nu Percent_Water Census_Blocs_uc	Loops Housing_Units_nu Housing_Units_uc Land_Area_nu Census_Blocs_uc	Loops Land_Area_nu	Loops Housing_Units_nu	Loops	Loops Housing_Units_nu Land_Area_nu	Loops Land_Area_nu	Loops Housing_Units_nu	Loops	Loops Housing_Units_nu	Loops Housing_Units_nu Land_Area_ua Census_Blocs_ua
11	6	5	2	2	1	3	2	2	1	2	4

List and Count of Independent Variables with p<.05 for 90th percentile regression per Appendix H, p. 638

Total Variables Included in Regression (not necessarily all significant)	AS1 CAT 1 CWF and CWF Capital Leases	AS2 Cat 4.13 COE and COE Capital Leases	AS7 Cat 1 Materials and Supplies	AS8 4.13 Materials and Supplies	AS13 Cat 1 CWF Expense	AS14 Cat 4.13 COE Expense	AS15 Cat 4.13 and Cat 1 GSF and Nework Support Expense	AS16 Cat 4.13 and Cat 1 Network Ops Expense	AS17 Cat 1 Depreciation Expense	AS18 Cat 4.13 Depreciation Expense	AS21 Cat 4.13 and Cat 1 Benefits (Excluding Corporate)
Loops Housing_Units_nu Housing_Units_uc Housing_Units_ua Land_Area_nu Land_Area_uc Land_Area_ua Percent_Water Census_Blocs_nu Census_Blocs_uc Census_Blocs_ua	Loops Housing_Units_nu Housing_Units_uc Land_Area_nu Percent_Water Census_Blocs_uc Census_Blocs_nu	Loops Housing_Units_nu Housing_Units_uc Land_Area_nu Census_Blocs_uc Census_Blocs_nu	Loops Housing_Units_nu Land_Area_nu	Loops Housing_Units_nu Land_Area_nu	Loops	Loops Housing_Units_nu Land_Area_nu Land_Area_ua	Loops Land_Area_nu	Loops Housing_Units_nu Percent_Water	Loops Housing_Units_nu Land_Area_nu	Loops Housing_Units_nu	Loops Housing_Units_nu Housing_Units_uc Housing_Units_ua Land_Area_ua Census_Blocs_ua
11	7	6	3	3	1	4	2	3	3	2	6

Appendix B : Ellijay, GA Case Study

Prepared by Alexicon Telecommunications Consulting

Study Area: **ELLIJAY TEL CO, GA**
Study Area Code: **220360**

SECTION 1: 90th Quantile Regression Analysis

Clmn:	(A)	(B)	(C)	(D)	(E)
	ALGORITHM STEP	**ACTUAL COST**	**90th QUANTILE CAP**	**CAP ROOM / DISALLOWED COSTS**	**CAPPED COSTS**
AS1	*Cable & Wire Facility deemed Category 1 ("CWF 1")*	$ 29,220,927	$ 41,710,821	12,489,894	$ 29,220,927
AS2	*Central Office Equipment, Category 4.13 ("COE 4.13")*	$ 13,786,303	$ 9,156,859	(4,629,444)	$ 9,156,860
AS3	"A" Factor CWF	0.943155	1.346287		0.943155
AS4	"B" Factor COE	0.636001	0.422432		0.422432
AS5	"C" Factor (CWF 1 Gross Allocator)	0.480127	0.685348		0.480127
AS6	"D" Factor (COE 4.13 Gross Allocator)	0.226522	0.150456		0.150456
AS7	*Materials & Supplies allocated to CWF 1*	$ 121,771	$ 520,647	398,876	$ 121,771
AS8	*Materials & Supplies allocated to COE 4.13*	$ 57,451	$ 103,985	46,534	$ 57,451
AS9	Accumulated Reserves allocated to CWF 1	$ 16,396,795	$ 23,405,273	7,008,478	$ 16,396,795
AS10	Accumulated Reserves allocated to COE 4.13	$ 12,825,874	$ 8,518,942	(4,306,932)	$ 8,518,943
AS13	*CWF Maintenance Expense allocated to CWF 1*	$ 252,031	$ 1,171,535	919,504	$ 252,031
AS14	*COE Maintenance Expense allocated to COE 4.13*	$ 1,384,222	$ 532,746	(851,477)	$ 532,747
AS15	*Network & General Support Exp to CWF 1 & COE 4.13*	$ 636,632	$ 636,632	0	$ 636,632
AS16	*Network Operations Expense to CWF 1 & COE 4.13*	$ 675,284	$ 739,528	64,244	$ 675,284
AS17	*Depreciation Expense allocated to CWF 1*	$ 1,455,786	$ 2,034,365	578,579	$ 1,455,786
AS18	*Depreciation Expense allocated to COE 4.13*	$ 1,013,149	$ 871,226	(141,923)	$ 871,227
AS19	Corporate Operations Expense to CWF 1 & COE 4.13	$ 1,473,807	$ 1,315,161	(158,646)	$ 1,315,161
AS20	Operating Taxes to CWF 1 & COE 4.13	$ 45,308	$ 53,588	8,280	$ 40,431
AS21	*Benefits (non-Corp Ops) to CWF1 & COE 4.13*	$ 625,117	$ 1,026,643	401,526	$ 625,117
AL22	Rents assigned to CWF 1 & COE 4.13	$ 705,023	$ 833,880	128,856	$ 629,132
AL23	Return Component for CWF 1	$ 1,456,414	$ 2,117,946	661,532	$ 1,456,414
AL24	Return Component for COE 4.13	$ 114,511	$ 83,463	(31,048)	$ 78,229
AL25	**Total Unseparated Costs**	$ 9,837,285	$ 11,416,713	1,579,428	$ 8,568,191
				13.8%	
	Total Loops	12,607	12,607		12,607
	Study Area Cost Per Loop (SACPL)	$ 780.30	$ 905.59		$ 679.64

SECTION 2: High Cost Loop Support Impact

Revised Study Area Cost Per Loop	$ 679.64	
Rural National Average Cost Per Loop (NACPL)	$ 505.97	
115% to 150% NACPL Bracket Recovery (65%)	$ 63.55	
>150% NACPL Bracket Recovery (75%)	$ -	
Total Revised High Cost Loop Support per Loop	$ 63.55	
Total Loops	12,607	
High Cost Loop Support, with QRA caps	$ 801,181	
High Cost Loop Support, without caps	$ 1,629,521	
Reduction in Support	**$ (828,340)**	**-51%**

Notes:

bold italics indicate algorithm steps directly capped by 90th Quantile Regression Analysis.

Accumulated Reserves includes Accumulated Depreciation and Amortization as well as Non-Deferred Operating Taxes

Corporate Operations Expense Limit uses unrevised calculation to match the FCC published list of revised SACPLs.

Appendix C: Cordova, AK Case Study

Study Area:　　　**CORDOVA TEL COOP, AK**
Study Area Code:　　**613007**

Clmn:	(A)	(B)		(C)		(D)		(E)	
	ALGORITHM STEP	**ACTUAL COST**		**90th QUANTILE CAP**		**CAP ROOM / DISALLOWED COSTS**		**CAPPED COSTS**	
AS1	*Cable & Wire Facility deemed Category 1 ("CWF 1")*	$	6,994,865	$	17,523,785	10,528,920	$	6,994,865	
AS2	*Central Office Equipment, Category 4.13 ("COE 4.13")*	$	6,714,510	$	3,999,575	(2,714,935)	$	3,999,576	
AS3	"A" Factor CWF		0.939001		2.352419			0.939001	
AS4	"B" Factor COE		0.676060		0.402703			0.402703	
AS5	"C" Factor (CWF 1 Gross Allocator)		0.352180		0.882293			0.352180	
AS6	"D" Factor (COE 4.13 Gross Allocator)		0.338064		0.201372			0.201372	
AS7	*Materials & Supplies allocated to CWF 1*	$	43,198	$	193,635	150,437	$	43,198	
AS8	*Materials & Supplies allocated to COE 4.13*	$	41,467	$	41,467	(0)	$	41,467	
AS9	Accumulated Reserves allocated to CWF 1	$	2,575,051	$	6,451,109	3,876,058	$	2,575,051	
AS10	Accumulated Reserves allocated to COE 4.13	$	3,675,061	$	2,189,092	(1,485,969)	$	2,189,093	
							$	-	
AS13	*CWF Maintenance Expense allocated to CWF 1*	$	158,656	$	322,883	164,226	$	158,656	
AS14	*COE Maintenance Expense allocated to COE 4.13*	$	493,964	$	256,060	(237,904)	$	256,061	
AS15	*Network & General Support Exp to CWF 1 & COE 4.13*	$	90,457	$	308,215	217,758	$	90,457	
AS16	*Network Operations Expense to CWF 1 & COE 4.13*	$	76,542	$	214,400	137,858	$	76,542	
AS17	*Depreciation Expense allocated to CWF 1*	$	221,233	$	752,905	531,671	$	221,233	
AS18	*Depreciation Expense allocated to COE 4.13*	$	409,939	$	392,526	(17,413)	$	392,527	
AS19	Corporate Operations Expense to CWF 1 & COE 4.13	$	548,673	$	440,017	(108,656)	$	440,017	
AS20	Operating Taxes to CWF 1 & COE 4.13	$	77,304	$	121,364	44,060	$	61,995	
AS21	*Benefits (non-Corp Ops) to CWF1 & COE 4.13*	$	295,820	$	317,807	21,986	$	295,820	
AL22	Rents assigned to CWF 1 & COE 4.13	$	62,793	$	98,582	35,789	$	50,358	
AL23	Return Component for CWF 1	$	502,089	$	1,267,459	765,370	$	502,089	
AL24	Return Component for COE 4.13	$	346,603	$	208,343	(138,260)	$	208,344	
AL25	**Total Unseparated Costs**	$	3,284,074	$	4,700,561	1,416,487	$	2,754,099	
						30.1%			
	Total Loops		1,800		1,800			1,800	
	Study Area Cost Per Loop (SACPL)	$	1,824.49	$	2,611.42		$	1,530.06	

SECTION 2: High Cost Loop Support Impact		
Revised Study Area Cost Per Loop	$	**1,530.06**
Rural National Average Cost Per Loop (NACPL)	$	505.97
115% to 150% NACPL Bracket Recovery (65%)	$	115.11
>150% NACPL Bracket Recovery (75%)	$	578.32
Total Revised High Cost Loop Support per Loop	$	693.43
Total Loops		1,800
High Cost Loop Support, with QRA caps	$	**1,248,174**
High Cost Loop Support, without caps	$	1,564,298
Reduction in Support	$	**(316,124)**	-20%

Notes:

　　bold italics indicate algorithm steps directly capped by 90th Quantile Regression Analysis.

　　Accumulated Reserves includes Accumulated Depreciation and Amortization as well as Non-Deferred Operating Taxes

　　Corporate Operations Expense Limit uses unrevised calculation to match the FCC published list of revised SACPLs.

United States Senate

WASHINGTON, DC 20510

April 6, 2011

The Honorable Julius Genachowski
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Dear Chairman Genachowski:

We write to you regarding the FCC's current efforts to reform the Universal Service Fund and intercarrier compensation system. We support modernizing these programs, including making them more accountable and broadband-focused to meet the goal of providing affordable and comparable communications service to all Americans. However, we also encourage the development of a support mechanism framework that does not jeopardize current or hamper future private sector and federal lending program investment.

Over the last three decades, communications carriers in rural areas have invested millions of dollars in communications networks supported not only by universal service, but also by private investment and federal telecommunications and broadband loan programs. As part of the ongoing reform effort, the FCC now proposes a number of new program restraints, benchmarks and formulas intended to make universal service more efficient and implement a new intercarrier compensation system. Telecommunication providers will be expected to adapt and manage their investments and businesses to those new standards and rules. Consequently, we believe these reform proposals must strike a balance to protect the investments that have already occurred and the need to overhaul the programs.

We believe strongly robust broadband networks will lead to increased adoption, job creation and economic opportunity. However, as the regulatory reform effort moves forward, we must also ensure new rules and regulations do not have unintended consequences and hamper our investment in our rural communities. Thus, we request that you seriously consider these concerns.

We look forward to working with you to address these matters.

Sincerely,

Mark Begich
Senator Mark Begich

John Thune
Senator John Thune

Tim Johnson

Orrin G. Hatch

Daniel K. Akaka

Amy Klobuchar

Al Franken

Jeffrey A. Merkley

Mark Udall

Heidi Heitkamp

Max Baucus

Claire McCaskill

Lisa Murkowski

E Benjamin Nelson

Tom Harkin

Jon Tester

(signature)

Mike Crapo

John Hoeven

Saxby Chambliss

John Boozman

Jim Risch

Mike Johanns

John Barrasso

Mark Pryor

Roy Blunt

Carl Levin

Jerry Moran

Mike Enzi

USDA Rural Development

United States Department of Agriculture
Rural Development

OPEN LETTER FROM THE ASSISTANT ADMINISTRATOR
February 3, 2012

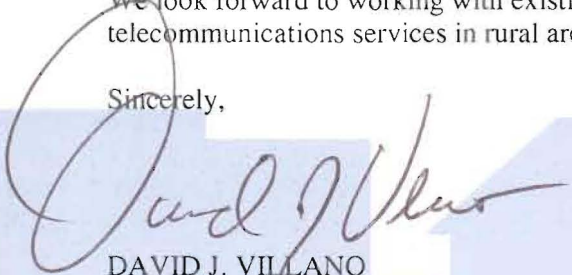To all Telecommunications Borrowers and Potential Loan Applicants:

As you are aware, the FCC released its Universal Service Fund and Intercarrier Compensation Reform Order and Further Notice of Proposed Rulemaking on November 18th, 2011 (the "Reform Order"). The Rural Utilities Service (RUS) recognizes that this may have an impact on the projected revenues for applicants applying under the Telecommunications Infrastructure Loan Program. In order to consider applications for this fiscal year, RUS requests that loan applicants submit full 5-year pro-forma financial statements (income statements, balance sheets, and statements of cash flow) along with supporting schedules covering network access revenue, debt, and plant deployment and depreciation, in addition to the non-operating and non-regulated revenue and expenses. Detailed line-by-line explanations for how the projections were developed should be provided so that the projections can be evaluated and to expedite review. Pro-forma statements should be in the same format as in the RUS Operating Report for Telecommunications Borrowers and include both an electronic format and hard-copy to further expedite review. Sample pro-forma statements and supplemental schedules are available to assist you online at:

http://www.rurdev.usda.gov/utp_infrastructure.html

In order to address the impact of the Reform Order, particular attention should be given to the schedule of projected network access revenue, which should be supplemented by a narrative detailing your assumptions. If you are, or propose becoming, a "Cost Company" for interstate purposes, the schedule should be prepared and signed by a Cost Consultant, in order to expedite RUS review and the determination of feasibility. Likewise, if you are an "Average Schedule Company" and intend to remain so, the qualifications of the preparer of the schedule should be provided.

We look forward to working with existing borrowers and loan applicants in providing new and improved telecommunications services in rural areas.

Sincerely,

DAVID J. VILLANO
Assistant Administrator
Telecommunications Program
Rural Utilities Service

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Committed to the future of rural communities.

"USDA is an equal opportunity provider, employer and lender."
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights,
1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (Voice) or (202) 720-6382 (TDD).